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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,670	11/21/2003	Yoichi Endo	100353-00180	9063

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EXAMINER

MISIURA, BRIAN THOMAS

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,670

Applicant(s)

ENDO ET AL.

Examiner

Brian T. Misiura

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 10, 12, 17 is/are rejected.
- 7) ☒ Claim(s) 2, 4-9, 11, 13-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/12/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Detailed Action

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Whipple, U.S. Patent No. 5,077,733.

1. As per claim 1, Whipple discloses a shared bus system, comprising:
 - a bus; (column 2, line 27)
 - a first circuit which accesses said bus; (Whipple, column 2, lines 32-33)
 - a second circuit which shares said bus with said first circuit, and accesses said bus; (Whipple, column 2, lines 32-33)
 - a counter circuit, which is provided in said second circuit, and performs a counting operation each time said second circuit accesses said bus; (Whipple, column 21 lines 36-39, and Abstract lines 8-15)
 - and an arbiter circuit which arbitrates requests for a right to use said bus between said first circuit and said second circuit (Whipple, column 13, lines 9-11, figure 3A), wherein said second circuit releases the right to use

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said bus in response to detection of a predetermined number of counting operations performed by said counter circuit after acquiring the right to use said bus from said arbiter circuit. (Abstract, lines 8-15 and column 13 lines 67-68, column 14 lines 1-10, figure 3A)

2. As per claim 3, Whipple discloses the system wherein a second circuit includes a register circuit, and the predetermined number is equal to a value stored in said register circuit (column 21, lines 54-60).

3. As per claim 10, Whipple discloses a method of sharing a bus, comprising the steps of:

- acquiring a right to use a shared bus by making a request (column 24, lines 65-68, column 25, lines 1-4);
- counting a number of accesses made to the shared bus after acquiring the right to use the shared bus (column 24, lines 65-68, column 25, lines 1-10);
- and releasing the shared bus in response to an event that the number of accesses reaches a predetermined number (claim 15, column 25, lines 11-12).

4. As per claim 12, Whipple discloses a method further comprising a step of storing a value in a register circuit, and the predetermined number is equal to the value stored in said register circuit. (column 21, lines 54-60)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whipple, U.S. Patent No. 5,077,733, in view of Takita et al, U.S. Patent No. 5,684,505.

Per claim 17, Whipple does not disclose a method wherein a bus is a memory bus to which a memory is connected, and a memory interface for accessing a memory through

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a memory bus shares a memory bus together with a liquid crystal display controlling circuit for controlling driving of a liquid crystal display device through said memory bus.

However Takita discloses a memory bus, display controller and a liquid crystal display device (Takita, column 38, lines 60-65).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Whipple and Takita.

One of ordinary skill would be motivated to use a liquid crystal display since such a type of device has been quite a well-known type of display device in prior existing art.

Allowable Subject Matter

Claims 2, 4-9, 11, and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Misiura whose telephone number is (571) 272-0889. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on (571)272-3676. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BTM



REHANA PERVEEN
PRIMARY EXAMINER
8/4/05